

WHAT IS CLAIMED IS:

1. A water pump, comprising:

a pump body;

a pump shaft which is rotatably supported by said pump body in a piercing state, and to which an impeller is attached at one end portion;

a mechanical seal which is disposed elastically via urging means, between said pump body and the end portion of said pump shaft where said impeller is attached; and

an engage mechanism which is disposed between said pump body and the end portion of said pump shaft opposite to the side where said impeller is attached, while engaging said pump shaft to said pump body against the urging force of said urging means;

wherein said engage mechanism comprises an annular member which is rotatably fitted to said pump shaft while contacting said pump body, and a cylindrical engage pin which pierces said pump shaft in the diameter direction while sandwiching said annular member with said pump body.

2. The water pump according to claim 1, wherein said annular member is formed so that the cross section in the diameter direction is roughly circular.

3. The water pump according to claim 1, wherein said annular member is formed so that the cross section in the diameter direction is plate-shaped, and an annular flange is formed at the circumference portion so as to face the end face of said engage pin.

4. The water pump according to claim 3, wherein said urging means is formed so that the possible expansion-and-contraction stroke is at least

equal to the height of said flange.

5. The water pump according to any one of claim 1 through 4, wherein said impeller is attached integrally to said pump shaft.

6. The water pump according to claim 5, wherein said impeller is integrated with said pump shaft by insert molding.